CLAIMS

I CLAIM:

- 1. A business model algorithm for mould detection in a building comprising: placing at least one mould detection device with mould notification means in a building location susceptible to growth of mould; and installing a mould notification receiving means in a location where it can be observed or activated.
- 2. A business model algorithm for mould detection in a building comprising: placing a multiplicity of mould detection devices with notification means in a building location susceptible to growth of mould; placing a mould notification receiver device suitable to receive notification from each of the mould detection devices in a location where it can be observed or activated.
- 3. An Electro-Optic Sensor for detecting the presence of mould or fungi comprising: a bio-nutrient treated substrate; an electro-optical transmitter/detector suitable to detect changes in the substrate; and notification means suitable to communicate the presence of changes in the substrate.
- 4. A method for detecting in-situ (on going) growth of mould or fungi spores onto a bio-nutrient treated surface wherein the detection is by means of an electro-optical transmitter/detector.
- 5. The method of claim 4 wherein the electro-optical transmitter is a light emitting diode in the visible and infrared spectrum, and the detector is matched to detect the output of the electro-optical transmitter.

- 6. The method of claim 4 wherein the electro-optical transmitter is a monochromatic light source, and the detector is matched to detect the output of the electro-optical transmitter.
- 7. The method of claim 4 wherein the bio-nutrient surface on which the spores are permitted to grow is maintained at a constant temperature.
- 8. The method of claim 4 wherein the bio nutrient with which the surface is treated is a known laboratory culturing material.
- 9. The method of claim 4 wherein the bio nutrient with which the surface is treated is a partially synthetic composition specially formulated to enhance the growth of selected mould species.
- 10. The method of claim 4 wherein air circulation enhancement is provided in order to increase the probability of mould spore capture for growth on the bio-nutrient surface.
- 11. The method of claim 4 wherein the bio-nutrient surface is electro-statically charged for enhanced attraction of spores to the bio-nutrient surface.
- 12. The method of claim 4 wherein the bio-nutrient surface is a specially shaped geometric shape and configuration for maximum spore attract-ability.
- 13. The method of claim 4 wherein the electro-optical transmitter/detector includes notification means suitable to communicate information to a remote receiving means.
- 14. The method of claim 4 wherein the bio-nutrient surface is removed from its location and transported to a laboratory for examination after a period of time.
- 15. A mould alarm comprising: an electronic mould detector; a mould detection signal generator; a mould detection signal receiver; and a mould detection signal display.
- 16. A mould alarm comprising: at least two capacitance type devices coated with bio-nutrient at different planes from on another; means to detect the dielectric value between the

capacitance type devices; and means to communicate the dielectric value to a location different from the location of the capacitance devices.

17. A mould alarm comprising: a mould detector; means to record mould detected by the mould detector; means to collect the mould detected; means to notify that mould exists; means to collect at least one sample of the mould detected; and means to analyze the sample.